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EXAMINER	
LY, ANH	

ART UNIT	PAPER NUMBER
2162	

DATE MAILED: 06/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/086,026	ODOM ET AL.	
	Examiner	Art Unit	
	Anh Ly	2162	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03/01/2005.*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-50* is/are pending in the application.

4a) Of the above claim(s) *6-7, 14-15, 20-22 and 27-28* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5, 8-11, 13,16-19, 23-24, 26 and 29-50* is/are rejected.

7)☒ Claim(s) *12 and 25* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This Office Action is response to Applicants' RESPONSE filed on 03/01/2006.

2. Claims 1-5, 8-13, 16-19, 22-26 and 29-50 are pending in this application.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claim 1 is rejected under 35 U.S.C. 101 because the claim 1 is lacking tangible result, useful result and practical utilities. The step of claim 1 recites "designating a word combination as topic if the segment level actual usage value ... is greater than the segment-level expected usage value of the word combination", is thought concept, that is, it is an "abstract idea" and non-tangible result and non-real world result. Applicant should only note that topic by itself does not produce a useful, concrete and tangible result. It is a non-functional descriptive material, which does not constitute a statutory process, machine, manufacture; but retrieving a topic ... from a storage medium is a statutory process.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 1, 11, 13, 16, 24, 26 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Patent No.: US 5,625,748 issued to McDonough et al. (hereinafter McDonough) in view of Patent No.: US 6,125,362 issued to Elworthy.

With respect to claim 1, McDonough teaches a method to identify topics in a data corpus having a plurality of segments (identifying the topics from a data corpus storing/recording a plurality of speech events/data samples of one or more people by using topic classier: col. 1, lines 28-32), comprising:

determining a segment-level actual usage value for one or more word combinations, wherein a word combination includes two or more substantially

contiguous words, wherein two words are substantially contiguous if they are separated by zero words or words selected from a predetermined list of words (determining a set of speech events to be detected by the text event detector of a topic discriminator for topic or phrase in the data corpus of speech events and determining the frequency of occurrence of the words or phrases, or multi-word phrases of the events: col. 6, lines 5-42 and col. 12, lines 41-64 and computing the event frequencies by counting the number of words or phrase event: col. 7, lines 5-25); and

computing a segment-level expected usage value for each of the one or more word combinations (estimating the event frequency of occurrence of potential speech events in spoken data based on the words or phrase of interest in the speech events: col. 5, lines 50-60 and col. 6, lines 30-40).

McDonough teaches topic classification from a data corpus containing a plurality of speech events/data samples by using topic classifier, determining the value of phrase in the speech events and computing and estimating the speech events based on the word or phrases. McDonough does not clearly teach designating a word combination as a topic if the segment level actual usage value of the word combination is greater than the segment-level expected usage value of the word combination.

However, Elworthy teaches comparing the probability of the occurrence with the known classifications in order to identify the topic (col. 5, lines 15-30).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined the teachings of McDonough with the teachings of Elworthy. One having ordinary skill in the art would have found it

motivated to utilize the use of comparing the actual event frequency with estimated event frequency for a words or phrases of a speech events as disclosed (Elworthy's col. 5, lines 20-28), into the system of McDonough for the purpose of analyzing the data to determine the words or phrases in the document or data corpus, thereby simplifying the processing for identifying classification to which data belongs (Elworthy's col. 1, lines 12-35).

With respect to claim 11, McDonough teaches wherein the act of determining a segment-level actual usage value for a word combination comprises determining the number of segments in the data corpus the word combination is in ().

With respect to claim 13, McDonough teaches a method to identify topics as discussed in claim 1.

McDonough teaches topic classification from a data corpus containing a plurality of speech events/data samples by using topic classifier, determining the value of phrase in the speech events and computing and estimating the speech events based on the word or phrases. McDonough does not clearly teach wherein the act of designating a word combination as a topic, comprises designating a word combination as a topic if the segment-level actual usage value of the word combination is greater than approximately twice the segment-level expected usage value of the word combination.

However, Elworthy teaches comparing the probability of the occurrence with the known classifications in order to identify the topic (col. 5, lines 15-30).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined the teachings of McDonough with

the teachings of Elworthy. One having ordinary skill in the art would have found it motivated to utilize the use of comparing the actual event frequency with estimated event frequency for a words or phrases of a speech events as disclosed (Elworthy's col. 5, lines 20-28), into the system of McDonough for the purpose of analyzing the data to determine the words or phrases in the document or data corpus, thereby simplifying the processing for identifying classification to which data belongs (Elworthy's col. 1, lines 12-35).

Claim 16 is essentially the same as claim 1 except that it is directed to a program storage device rather than a method, and is rejected for the same reason as applied to the claim 1 hereinabove.

Claim 24 is essentially the same as claim 11 except that it is directed to a program storage device rather than a method, and is rejected for the same reason as applied to the claim 11 hereinabove.

Claim 26 is essentially the same as claim 13 except that it is directed to a program storage device rather than a method, and is rejected for the same reason as applied to the claim 13 hereinabove.

With respect to claim 49, McDonough teaches a method to identify topics in a data corpus having a plurality of segments (identifying the topics from a data corpus storing/recording a plurality of speech events/data samples of one or more people by using topic classier: fig. 1, item 16, col. 5, lines 60-67; also col. 1, lines 28-60), comprising:

determining a segment-level actual usage value for one or more word combinations, wherein a word combination includes two or more substantially contiguous words, wherein two words are substantially contiguous if they are separated by zero words or words selected from a predetermined list of words (determining a set of speech events to be detected by the text event detector of a topic discriminator for topic or phrase in the data corpus of speech events and determining the frequency of occurrence of the words or phrases, or multi-word phrases of the events: col. 6, lines 5-42 and col. 12, lines 41-64 and computing the event frequencies by counting the number of words or phrase event: col. 7, lines 5-25); and

computing a segment-level expected usage value for each of the one or more word combinations, wherein the segment-level expected usage value is based on frequency counts of words that form the word combination within the data corpus or portion thereof (estimating the event frequency of occurrence of potential speech events in spoken data based on the words or phrase of interest in the speech events: col. 5, lines 50-60 and col. 6, lines 30-40).

McDonough teaches topic classification from a data corpus containing a plurality of speech events/data samples by using topic classifier, determining the value of phrase in the speech events and computing and estimating the speech events based on the word or phrases. McDonough does not clearly teach designating a word combination as a topic if the segment level actual usage value of the word combination is greater than the segment-level expected usage value of the word combination.

However, Elworthy teaches comparing the probability of the occurrence with the known classifications in order to identify the topic (col. 5, lines 15-30).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined the teachings of McDonough with the teachings of Elworthy. One having ordinary skill in the art would have found it motivated to utilize the use of comparing the actual event frequency with estimated event frequency for a words or phrases of a speech events as disclosed (Elworthy's col. 5, lines 20-28), into the system of McDonough for the purpose of analyzing the data to determine the words or phrases in the document or data corpus, thereby simplifying the processing for identifying classification to which data belongs (Elworthy's col. 1, lines 12-35).

8. Claims 2-5, 8-10, 17-19 and 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Patent No.: US 5,625,748 issued to McDonough et al. (hereinafter McDonough) in view of Patent No.: US 6,125,362 issued to Elworthy and further in view of Pub. No.: US 2004/0024739 A1 of Copperman et al. (hereinafter Copperman).

With respect to claims 2-5, McDonough in view of Elworthy discloses a method for identifying topics as discussed in claim 1.

McDonough and Elworthy disclose substantially the invention as claimed.

McDonough and Elworthy do not teach wherein each of the plurality of segments comprises a portion of a document, wherein the portion of a document comprises a paragraph, wherein the portion of a document comprises a heading and wherein the portion of a document comprises the entire document.

However, Copperman teaches portion, document, title, headers (sections 0045-0046).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of McDonough in view of Elworthy with the teachings of Copperman by incorporating the use of segments and portion of a document. The motivation being to organize and retrieve information through the use of a document classifier for orderly storage and retrieval of information (Copperman's sections 0002-0004 and 0007-0009).

With respect to claim 8, McDonough in view of Elworthy discloses a method for identifying topics as discussed in claim 1.

McDonough and Elworthy disclose substantially the invention as claimed.

McDonough and Elworthy do not teach stop word.

However, Copperman teaches stop word (section 0125).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of McDonough in view of Elworthy with the teachings of Copperman by incorporating the use of segments and portion of a document. The motivation being to organize and retrieve information through the use of a document classifier for orderly storage and retrieval of information (Copperman's sections 0002-0004 and 0007-0009).

With respect to claims 9-10, McDonough in view of Elworthy discloses a method for identifying topics as discussed in claim 1.

McDonough and Elworthy disclose substantially the invention as claimed.

McDonough and Elworthy do not teach list of words and a list of domain of words.

However, Copperman teaches stop word (section 0125) and domain specific word (section 0048).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of McDonough in view of Elworthy with the teachings of Copperman by incorporating the use of segments and portion of a document. The motivation being to organize and retrieve information through the use of a document classifier for orderly storage and retrieval of information (Copperman's sections 0002-0004 and 0007-0009).

Claim 17 is essentially the same as claim 2 except that it is directed to a program storage device rather than a method, and is rejected for the same reason as applied to the claim 2 hereinabove.

Claim 18 is essentially the same as claim 3 except that it is directed to a program storage device rather than a method, and is rejected for the same reason as applied to the claim 3 hereinabove.

Claim 19 is essentially the same as claim 5 except that it is directed to a program storage device rather than a method, and is rejected for the same reason as applied to the claim 5 hereinabove.

Claim 22 is essentially the same as claim 9 except that it is directed to a program storage device rather than a method, and is rejected for the same reason as applied to the claim 7 hereinabove.

Claim 23 is essentially the same as claim 10 except that it is directed to a program storage device rather than a method, and is rejected for the same reason as applied to the claim 10 hereinabove.

9. Claims 29-48 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Patent No.: US 5,625,748 issued to McDonough et al. (hereinafter McDonough) in view of Patent No.: US 6,125,362 issued to Elworthy and further in view of Patent No.: US 5,987,460 issued to Niwa et al. (hereinafter Niwa).

With respect to claim 29, McDonough in view of Elworthy discloses a method for identifying topics as discussed in claim 1.

McDonough and Elworthy disclose substantially the invention as claimed.

McDonough and Elworthy do not teach identifying a result set based on an initial user query, the result set identifying a plurality of stored data items; identifying those topics associated with the stored data items identified in the result set, wherein said topics are identified by a method as in claims 1, 11, or 12; selecting for display a topic associated with the most identified stored data items; selecting for display another topic, said another topic associated with the most identified stored data items not associated with a previously identified display topic, wherein this step is repeated until all identified stored items in the result set have been accounted for; and displaying the selected display topics.

However, Niwa teaches the retrieval results is displayed on the means for displaying topic words and selecting topic words in retrieved document and the topic word are classified by occurrence frequency (abstract, col. 3, lines 60-67 and col. 4, lines 1-18; fig. 3, fig. 19 and col. 4, lines 45-67 and col. 5, lines 1-12).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of McDonough in view of

Elworthy with the teachings of Niwa by incorporating the use of selecting and displaying the topic words. The motivation being to provide a user interface for document retrieval and displaying of topic words in a list form and retrieve information through the use of a document classifier for orderly storage and retrieval of information (Niwa's col. 1, lines 10-15 and col. 2, lines 15-35).

With respect to claims 30-35, and 38, McDonough in view of Elworthy discloses a method for identifying topics as discussed in claim 1.

McDonough and Elworthy disclose substantially the invention as claimed.

McDonough and Elworthy do not teach identifying an initial result set, the initial result set identifying a plurality of stored data items; and selectively identifying a subset of the initial result set as the result set; wherein the act of selectively identifying comprises randomly selecting a specified portion of the initial result set; wherein the act of randomly selecting comprises randomly selecting approximately one percent of the initial result set; wherein the act of identifying those topics associated with the stored data items identified in the result set, comprises generating a list of unique topics associated with the identified stored data items; and removing from the generated list those topics that are associated with more than a specified fraction of the identified stored data items; and removing from the generated list those topics that are associated with more than approximately eighty-percent (80%) of the identified stored data items.

However, Niwa teaches set of retrieval result is displayed on the means for displaying topic words and selecting topic words in retrieved document and the topic word are classified by occurrence frequency (abstract, col. 3, lines 60-67 and col. 4,

lines 1-18 and col. 5, lines 18-56; fig. 3, fig. 19 and col. 4, lines 45-67 and col. 5, lines 1-12).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of McDonough in view of Elworthy with the teachings of Niwa by incorporating the use of selecting and displaying the topic words. The motivation being to provide a user interface for document retrieval and displaying of topic words in a list form and retrieve information through the use of a document classifier for orderly storage and retrieval of information (Niwa's col. 1, lines 10-15 and col. 2, lines 15-35).

With respect to claim 36, McDonough teaches displaying a selected number of stored data item identifiers (topic identification: col. 1, lines 15-28).

With respect to claim 37, McDonough in view of Elworthy discloses a method for identifying topics as discussed in claim 1.

McDonough and Elworthy disclose substantially the invention as claimed.

McDonough and Elworthy do not teach displaying a hyperlink.

However, Niwa teaches links and topic words (fig. 8).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of McDonough in view of Elworthy with the teachings of Niwa by incorporating the use of displaying of links of the nodes of the topic words. The motivation being to provide a user interface for document retrieval and displaying of topic words in a list form and retrieve information through the

use of a document classifier for orderly storage and retrieval of information (Niwa's col. 1, lines 10-15 and col. 2, lines 15-35).

Claim 39 is essentially the same as claim 29 except that it is directed to a program storage device rather than a method, and is rejected for the same reason as applied to the claim 29 hereinabove.

Claim 40 is essentially the same as claim 30 except that it is directed to a program storage device rather than a method, and is rejected for the same reason as applied to the claim 30 hereinabove.

Claim 41 is essentially the same as claim 31 except that it is directed to a program storage device rather than a method, and is rejected for the same reason as applied to the claim 31 hereinabove.

Claim 42 is essentially the same as claim 32 except that it is directed to a program storage device rather than a method, and is rejected for the same reason as applied to the claim 32 hereinabove.

Claim 43 is essentially the same as claim 33 except that it is directed to a program storage device rather than a method, and is rejected for the same reason as applied to the claim 33 hereinabove.

Claim 44 is essentially the same as claim 34 except that it is directed to a program storage device rather than a method, and is rejected for the same reason as applied to the claim 34 hereinabove.

Claim 45 is essentially the same as claim 35 except that it is directed to a program storage device rather than a method, and is rejected for the same reason as applied to the claim 35 hereinabove.

Claim 46 is essentially the same as claim 36 except that it is directed to a program storage device rather than a method, and is rejected for the same reason as applied to the claim 36 hereinabove.

Claim 47 is essentially the same as claim 37 except that it is directed to a program storage device rather than a method, and is rejected for the same reason as applied to the claim 37 hereinabove.

Claim 48 is essentially the same as claim 38 except that it is directed to a program storage device rather than a method, and is rejected for the same reason as applied to the claim 38 hereinabove.

With respect to claim 50, McDonough in view of Elworthy discloses a method for identifying topics as discussed in claim 1.

McDonough and Elworthy disclose substantially the invention as claimed.

McDonough and Elworthy do not teach identifying a result set based on an initial user query, the result set identifying a plurality of stored data items; identifying those topics associated with the stored data items identified in the result set, wherein said topics are identified by a method as in claim 49; selecting for display a topic associated with the most identified stored data items; selecting for display another topic, said another topic associated with the most identified stored data items not associated with a previously identified display topic, wherein this step is repeated until all identified stored

items in the result set have been accounted for; and displaying the selected display topics.

However, Niwa teaches the retrieval results is displayed on the means for displaying topic words and selecting topic words in retrieved document and the topic word are classified by occurrence frequency (abstract, col. 3, lines 60-67 and col. 4, lines 1-18; fig. 3, fig. 19 and col. 4, lines 45-67 and col. 5, lines 1-12).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of McDonough in view of Elworthy with the teachings of Niwa by incorporating the use of selecting and displaying the topic words. The motivation being to provide a user interface for document retrieval and displaying of topic words in a list form and retrieve information through the use of a document classifier for orderly storage and retrieval of information (Niwa's col. 1, lines 10-15 and col. 2, lines 15-35).

Allowable Subject Matter

10. Claims 12 and 25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Contact Information

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh Ly whose telephone number is (571) 272-4039 or via E-Mail: ANH.LY@USPTO.GOV (**Written Authorization being given by Applicant (MPEP 502.03 [R-2])) or fax to (571) 273-4039 (Examiner's personal Fax No.**). The examiner can normally be reached on TUESDAY – THURSDAY from 8:30 AM – 3:30 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene, can be reached on (571) 272-4107 or **Primary Examiner: Jean Corrielus (571) 272-4032**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). Any response to this action should be mailed to: Commissioner of Patents and Trademarks, Washington, D.C. 20231, or faxed to:

Central Fax Center: (571) 273-8300

ANH LY
MAY 24th, 2006

JEAN M. CORRIELUS
PRIMARY EXAMINER